

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/641,540

DATE: 09/05/2000
 TIME: 11:31:02

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\09052000\I641540.raw

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1 <110> APPLICANT: Misra, Santosh
3 <120> TITLE OF INVENTION: PLANT-GENE PROMOTER AND METHODS OF USING THE SAME
5 <130> FILE REFERENCE: 54358
C--> 7 <140> CURRENT APPLICATION NUMBER: US/09/641,540
C--> 8 <141> CURRENT FILING DATE: 2000-08-18
10 <160> NUMBER OF SEQ ID NOS: 28
12 <170> SOFTWARE: PatentIn Ver. 2.1
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 6
16 <212> TYPE: DNA
17 <213> ORGANISM: Artificial Sequence
19 <220> FEATURE:
20 <221> NAME/KEY: variation
21 <222> LOCATION: (3)..(4)
22 <223> OTHER INFORMATION: N = A, C, G, or T
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
26 ELEMENT
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W--> 29 canntg 6
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51 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
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62 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:
65 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
66 ELEMENT
68 <400> SEQUENCE: 4
69 acgt 4

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Input Set : A:\Pto.amc
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79 <222> LOCATION: (3)..(4)
80 <223> OTHER INFORMATION: N = A, C, G, and T
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
84 ELEMENT
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91 <211> LENGTH: 13
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
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130 <211> LENGTH: 4
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136 ELEMENT
138 <400> SEQUENCE: 9
139 caat 4

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Input Set : A:\Pto.amc
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142 <210> SEQ ID NO: 10
143 <211> LENGTH: 2322
144 <212> TYPE: DNA
145 <213> ORGANISM: Pseudotsuga menziesii
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149 cttccaaaaa aaaatgaagg gataagggat ggtttggatg gcaagggatt tcaacattgg 120
150 aagatccttt gaggttttta tttggaagat gatttgaagt tticactaaa taattgatat 180
151 gatgataatg acaaagataa tagttactac attgaaacca attttagttt aataatttct 240
152 taaaaaaata taagccccaa tctaattttg aaatttgaag gatatatgat tattcaacct 300
153 aaagagataa gataagatcc aactccttcg agtgcctttg gtgacataaa tataagggttt 360
154 atccatttgc gacgatgata tacaatggac gatccagaaa gtccctataa aaatgaggat 420
155 ttcacgaaag aatcccatgt tacggctcag gatttcgaca ttgaaagatc cattaatgag 480
156 atgcttgagg ggggctcagc actgaatgcg ccctgtccca cttcgaagag attccaccgg 540
157 cgtctcttgc ctttctattg ttgttttggg ttctcatggc gggctctgtg acaataacct 600
158 cagcttcggc catctataat tgccacggaa ggctgtctct cttctcaaca atcaaagcaa 660
159 aagcaaaagt tattctgtgt attgcaattt ccaacgttga aagatccatt attgagatgc 720
160 cctgtccccc ttcatgagaa ttccaccacg tgccttgccc ctttcattgt tgtttggatt 780
161 ctaatggcgg gctctgtggc cataccttca gcttcggcca cttataaatg ccacggaagg 840
162 ctgctcttct tctcaacaat caaagcaaaa tcagagagaa ttctgtgtat tgcgggtttc 900
163 cgacgtttgt atcagtttct tgtgtttgtt aacgatctgc aaacatgtct tctgacggca 960
164 aagactgtgg ctgtgcccgc ccaacccaat gcgagtaagt cctctcttta ttccaggttt 1020
165 cctcctcacc tcaattcatt atcagatccg tgtaaatatt ttcagttttt aatggctgat 1080
166 atcagttttt gttgtgttta ctgctattaa taatggcagc aagaagggca actccttggg 1140
167 agtggagatg gttgaaacca gctacgacta caacatgaac atgaggtgag ttttgggcat 1200
168 tatttgtttt aaagattgaa acatgcaatg aatctaactc ggtttccaat tttgctgtct 1260
169 cagcttcggc ttcgactacg agatggaaac tgtggctgct gagaacggct gcaaatccgg 1320
170 agcaagctcc aagtactcca acgctgcaa ctgaattatg gaggacataa aagacttgct 1380
171 acatattata tatatagaaa ataagtgttg tgtgatgtcg agggatctca cgatgttatt 1440
172 gatgtcatgt ctgggtgttg tattctaacc gtgtcactgt tgtaatgccg gcttcctctc 1500
173 ttatttaact atgatatgat attttagagt aatttgtgtt atatgattat gtgcttttct 1560
174 atcttattaa ctatgttatt agtcctgtct ttgaggagt ggcagggact ctatgaaagg 1620
175 gcttgcaatc gtttcattag tctgcacgc aaatcaaaga tatatatttt tattagtcct 1680
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177 tggtttcatt agtctgtgac acaaaccaaa gatatatatt tcacatgtat cctaagtcct 1800
178 tactcacctt aaagtattta tgacatgtat actaagttta aagcactatg tcacacgtat 1860
179 ctagttagtt ttaactatta ccatcaaaag ttgagtcctg ttggcctggg atcgaggcaa 1920
180 aggcaagaaa gggcagctat actttcatac atttgaaata ttaattcatg gtatcgaaca 1980
181 tatttgaaat attaatcat ggtattgaac atatgttata ctttttgaat aatgctaaca 2040
182 atcctcgtag cattaacttc cttacattta gtatgattgc aaatcaaaaa ttatagtatg 2100
183 attgtaacta aaaaattata ttctatcaat gcatgtagca caagccgcct tcacacctgc 2160
184 caagaaactt ctgcatgcaa cacatgcctt cttcacacct accaagaaac ttctaggtgt 2220
185 taatttgctc aagctagttc tacgtgtaga ttacacaag ctgaaacaat gcagtggtgca 2280
186 tgccttatgt taacacctgc ctgaacttc tactaggaat tc 2322
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190 <211> LENGTH: 207
191 <212> TYPE: DNA
192 <213> ORGANISM: Pseudotsuga menziesii
194 <400> SEQUENCE: 11

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195 atgtcttctg acggcaaaaga ctgtggctgt gccgacccaa cccaatgcga caagaagggc 60
196 aactccttgg gagtggagat ggttgaaacc agctacgact acaacatgaa catgagcttc 120
197 ggcttcgact acgagatgga aactgtggct gctgagaacg gctgcaaadc cggagcaagc 180
198 tccaagtact ccaaccgctg caactga 207
201 <210> SEQ ID NO: 12
202 <211> LENGTH: 968
203 <212> TYPE: DNA
204 <213> ORGANISM: Pseudotsuga menziesii
206 <220> FEATURE:
207 <221> NAME/KEY: promoter
208 <222> LOCATION: (1)..(856)
210 <400> SEQUENCE: 12
211 attatggagg acataaaaga cttgctacat attatatata tagaaaataa gtgttggtg 60
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213 cactgttgta atgccggcct tcctctttta ttaactatga tatgatattt tagagtaatt 180
214 tgtgttatat gattatgtgc tttctatctt tattaactat gttattagtc cctgctttga 240
215 ggagttggca gggactctat gaaagggctt gcaatcggtt cattagtcct gcacgcaaat 300
216 caaagatata tttttttatt agtcctgcac gcaaatataa gatatttttt tttttgaatg 360
217 tagggactgt atgaaagggc ttgtagtggg ttcattagtc ctgtacacaa accaaagata 420
218 tatatttcac atgtatccta agtctttact caccctaaag ttattatgac atgtatacta 480
219 agtttaaaag actatgtcac acgtatctag ttagttttac tatttaccat caaaagttga 540
220 gtcttggttg cctggatcag aggcaaaagg aagaaagggc agctatactt tcatacattt 600
221 gaaatattaa ttcattggat cgaacatatt tgaaatatta attcatggta ttgaacatat 660
222 gttatacttt ttgaataatg ctaacaatcc tcgtagcatt acttccctta catttagtat 720
223 gattgcgaat caaaaattat agtatgattg taactaaaaa attatattct atcaatgcat 780
224 gtagcacaa cgcctctcac acctgccaag aaacttctgc atgcaacaca tgccttcttc 840
225 acacctacca agaaacttct aggtgttaat ttgctcaagc tagttctacg tgtagattta 900
226 cacaagctga aacaatgcag tgtgcatgcc ttatgttaac acctgcctag aacttctact 960
227 aggaattc 968
230 <210> SEQ ID NO: 13
231 <211> LENGTH: 68
232 <212> TYPE: PRT
233 <213> ORGANISM: Pseudotsuga menziesii
235 <400> SEQUENCE: 13
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237 1 5 10 15
239 Asp Lys Lys Gly Asn Ser Leu Gly Val Glu Met Val Glu Thr Ser Tyr
240 20 25 30
242 Asp Tyr Asn Met Asn Met Ser Phe Gly Phe Asp Tyr Glu Met Glu Thr
243 35 40 45
245 Val Ala Ala Glu Asn Gly Cys Lys Ser Gly Ala Ser Ser Lys Tyr Ser
246 50 55 60
248 Asn Arg Cys Asn
249 65
252 <210> SEQ ID NO: 14
253 <211> LENGTH: 9
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:

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267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
272     ELEMENT
274 <400> SEQUENCE: 15
275 ttatcatc
278 <210> SEQ ID NO: 16
279 <211> LENGTH: 13
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
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284 <223> OTHER INFORMATION: Description of Artificial Sequence: PROMOTER
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287 <400> SEQUENCE: 16
288 cgaagagca atg
291 <210> SEQ ID NO: 17
292 <211> LENGTH: 853
293 <212> TYPE: DNA
294 <213> ORGANISM: Pseudotsuga menziesii
296 <400> SEQUENCE: 17
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298 cttccaaaaa aaaatgaagg gataagggat ggtttggatg gcaagggatt tcaacattgg 120
299 aagatccttt gaggttttta tttggaagat gatttgaagt tttcactaaa taattgatat 180
300 gatgataatg acaagataa tagttactac attgaaacca attttagttt aataatttct 240
301 taaaaaaata taagcccaa tctaattttg aaatttgaaa gatatatgat tattcaacct 300
302 aaagagataa gataagatcc aactccttcg agtgcttttg gtgacataaa tatagggttt 360
303 atccatttgc gacgatgata tacaatggac gatccagaaa gttccctata aaatgaggat 420
304 ttcacgaaag aatccattg tacggctcag gatttcgaca ttgaaagatc cattaatgag 480
305 atgcttggca ggggctcagc actgaatgcg ccctgtccca cttcgaagag attccaccgg 540
306 cegttctgcg cctttcattg ttgttttggg ttctcatggc gggctctgtg acaataacctg 600
307 cagcttcggc catctataat tgccacggaa ggctgctctt cttctcaaca atcaaagcaa 660
308 aagcaaaagt tattctgtgt attgcaattt ccaacgttga aagatccatt attgagatgc 720
309 cctgtcccac ttcgatgaga ttccaccacg tgtcttgcgc ctttcattgt tgtttgatt 780
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311 ctgctcttct tct
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315 <211> LENGTH: 6
316 <212> TYPE: DNA
317 <213> ORGANISM: Artificial Sequence
319 <220> FEATURE:
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321     ELEMENT
  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY DATE: 09/05/2000
PATENT APPLICATION: US/09/641,540 TIME: 11:31:03

Input Set : A:\Pto.amc
Output Set: N:\CRF3\09052000\I641540.raw

L:7 M:270 C: Current Application Number differs, Replaced Application Number
L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:29 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21